

STATE OF CALIFORNIA  
STATE WATER RESOURCES CONTROL BOARD

In the Matter of the )  
Diversion and Use of Water )  
from Big Bear Lake and Bear )  
Creek in San Bernardino )  
County by )

BIG BEAR MUNICIPAL WATER )  
DISTRICT and )

BEAR VALLEY MUTUAL WATER )  
COMPANY. )

ORDER: WR 95-4

SOURCE: Bear Creek

COUNTY: San Bernardino

ORDER REQUIRING MINIMUM RELEASES OF WATER  
FROM BEAR VALLEY DAM FOR FISHERY PROTECTION

## TABLE OF CONTENTS

	<u>PAGE</u>
1.0 INTRODUCTION . . . . .	1
2.0 COMPLAINT . . . . .	2
3.0 BACKGROUND . . . . .	2
3.1 <u>History and Physical Setting</u> . . . . .	2
3.2 <u>Water Rights</u> . . . . .	4
3.3 <u>The Bear Creek Wild Trout Fishery</u> . . . . .	5
3.4 <u>Accessibility and Use of Bear Creek</u> . . . . .	6
3.5 <u>Recreational and Fish and Wildlife Uses of Big Bear Lake</u> . . . . .	6
3.6 <u>Water Supply in Bear Valley</u> . . . . .	8
3.7 <u>Waste Water Outfall</u> . . . . .	9
4.0 PARTIES . . . . .	10
5.0 PUBLIC TRUST RESOURCES AND REASONABLE USE . . . . .	14
5.1 <u>SWRCB Authority</u> . . . . .	14
5.2 <u>Applicability of Public Trust Doctrine to Bear Creek</u> . . . . .	17
5.3 <u>Effect of Other Laws on the Establishment of Protections under the Public Trust Doctrine</u> . . . . .	18
5.3.1 <u>Fish and Game Code Section 5937</u> . . . . .	18
5.3.2 <u>The Davis-Grunsky Contract</u> . . . . .	19
5.4 <u>The Bear Creek Fishery</u> . . . . .	20
5.5 <u>Effects of Alternative Flow Releases</u> . . . . .	23
5.5.1 <u>Method of Analysis of Effects on Lake Levels</u> . . . . .	24
5.5.2 <u>Effect of Alternatives on Lake Recreation</u> . . . . .	28
5.5.3 <u>Effect of Alternatives on Fish and Wildlife Uses of the Lake</u> . . . . .	29

	<u>PAGE</u>
5.5.4 Considerations in Setting an Instream Flow . . . . .	30
5.5.5 Potential Effects of Unrelated Actions on Lake Level . . . . .	34
6.0 ENVIRONMENTAL CONSIDERATIONS . . . . .	35
6.1 <u>Categorical Exemption from California Environmental Quality Act</u> . . . . .	35
6.2 <u>Endangered Species Act Considerations</u> . . . . .	37
7.0 CONCLUSIONS . . . . .	38
ORDER . . . . .	39
CERTIFICATION . . . . .	42

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1.0 INTRODUCTION

On October 24, 1990 California Trout, Inc. (Cal-Trout) filed a complaint against Big Bear Municipal Water District's (District) operation of Bear Valley Dam and Big Bear Lake in San Bernardino County. The complaint alleged that the District's operation of Bear Valley Dam and Big Bear Lake provides insufficient releases of water into Bear Creek to keep the fishery in good condition. The State Water Resources Control Board (SWRCB) staff conducted an investigation and recommended that either a water right hearing be held to receive evidence that would assist the SWRCB in resolving the complaint, or the parties negotiate a settlement of the issues in the complaint. Attempts at negotiation failed, and on July 28, 1993 the SWRCB gave notice of a public hearing. A pre-hearing orientation tour was held on September 29, 1993 and a hearing to receive non-evidentiary policy statements was conducted on September 29 and 30, 1993 in the City of Big Bear Lake. The evidentiary hearing was held on October 12 and 13, 1993, November 18 and 19, 1993, and December 13, 1993. The SWRCB has considered all the evidence in the hearing record and has considered the policy statements and the written closing arguments of the parties. The SWRCB finds and concludes as follows:

## 2.0 COMPLAINT

Cal-Trout in its complaint alleges that since 1977 the District, which operates Bear Valley Dam and Big Bear Lake, has cut back releases of water from Bear Valley Dam for downstream prior rights and has substituted purchased water from a source other than Big Bear Lake for use by the prior right holders. The complaint alleges that this is causing inadequate instream flows in Bear Creek. Cal-Trout alleges that the District refuses to release from the dam more than 0.106 cubic feet per second (cfs).

Cal-Trout alleges that the District is failing to keep the downstream fishery in good condition. The complaint alleges that the small releases violate the public trust interest in maintaining trout in Bear Creek in good condition. The complaint further alleges that continuing the small releases violates Fish and Game Code section 5937 and is an unreasonable use of water within the meaning of Water Code sections 100 and 275.

Cal-Trout requests that the SWRCB order the District to conduct an Instream Flow Incremental Methodology (IFIM) study to determine the needed flows. In the interim, Cal-Trout requests that the district be ordered to conduct a Tennant Method study to determine interim flow requirements and release the Tennant Method flows. Cal-Trout requests that after completion of an IFIM study, the SWRCB convene a further proceeding to establish permanent flow releases.

## 3.0 BACKGROUND

### 3.1 History and Physical Setting

Big Bear Lake is a 73,320 acre-foot (af) reservoir located in the San Bernardino Mountains in San Bernardino County. The lake occupies part of Bear Valley. Its maximum surface area is 2,973 acres, and its maximum surface elevation is 6,743 feet above sea level. Bear Valley Dam impounds the water in the lake.

Baldwin Lake also is located in Bear Valley, to the east of Big Bear Lake. Baldwin Lake is smaller and shallower than Big Bear

Lake. It is generally considered a dry lake although it occasionally retains water through a summer. Baldwin Lake is a natural sink. Baldwin Lake has no surface hydrological connection to Big Bear Lake.

A dam was first constructed at the site of Bear Valley Dam in 1884. The reservoir was enlarged in 1911 to its current size by construction of a new dam downstream of the original dam. The new dam was reinforced in 1988. The original purpose of the reservoir was to impound water for irrigation use in the San Bernardino Valley. Irrigation uses from the reservoir continued into the late 1970's, but recreational uses on and around the lake had increased in importance over time. The residents of Bear Valley voted in 1964 to create the District, with the purpose of changing the Lake's primary use to recreation. Litigation ensued, with the District seeking to acquire Big Bear Lake by condemnation. In 1977 the parties stipulated to a judgment in which the District acquired the dam, the land under the lake, and the surface recreational rights to the lake. The parties also stipulated to a judgment in which the District was allowed to provide a substitute, or "in lieu", water supply for the water right holders in the San Bernardino Valley instead of releasing water from Big Bear Lake.

Tourism is the principal economic base for the City of Big Bear Lake and nearby unincorporated communities in Bear Valley. Big Bear Lake is easily accessible from the urban areas in southern California. Bear Valley and Big Bear Lake offer boating, fishing, water contact recreation, winter skiing, sightseeing, hiking, and other outdoor recreation.

Releases from Bear Valley Dam flow into Bear Creek and then into the Santa Ana River. From the dam, Bear Creek flows through a steep canyon in a southwesterly direction approximately 8.75 miles to its confluence with the Santa Ana River. It receives flow from several tributaries along the way. In 1988, the California Department of Fish and Game (DFG) designated Bear

Creek as a "wild trout stream" in recognition of its excellent wild trout fishery resource.

Most access trails to Bear Creek<sup>1</sup> are steep and difficult, and the creek is difficult to walk along, with large boulders and heavy tangled vegetation along the creek. Only physically fit individuals are able to use the creek for fishing, due to the terrain.

### 3.2 Water Rights

According to the judgment of the San Bernardino County Superior Court filed February 7, 1977, Bear Valley Mutual Water Company (Mutual) holds water rights to divert water at Bear Valley Dam and to store in Big Bear Lake all of the flow of Bear Creek. Mutual can take up to 65,000 af from the lake in any ten-year period for the use of its stockholders. Mutual's water rights are based on pre-1914 appropriations commenced in 1883 and 1909.

The judgment authorizes the District to deliver a substitute water supply to Mutual in lieu of releasing water from Big Bear Lake. The District and Mutual have an accounting system to keep track of the water each can retain or take for use. Each has an "account". When the District provides substitute water to Mutual, it gets credit in its account for storing water in Big Bear Lake. Inflow is credited to Mutual's account. If the lake spills, the spills are deducted from the District's account unless there is no water in the District's account. If water is released from the lake for Mutual's use, the release is deducted from Mutual's account. If the District's water account is zero, then any spilled water is accounted to Mutual, and the District must either release water from the lake to meet Mutual's demands or supply to Mutual in-lieu water.

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<sup>1</sup> In the lowest part of Bear Creek, there is vehicular access to the Slide Creek area.

In 1987 the District adopted its current policy for complying with the 1977 judgment. Under the policy, the District maintains the lake level as high as possible for recreational purposes, using the following operational rules:

1. When the lake is less than 4 feet below its maximum elevation, the District meets Mutual's irrigation demands by releasing water from Big Bear Lake.
2. When the lake is between 4 and 6 feet below its maximum elevation, the District purchases in-lieu water between May 1 and October 31, and releases water from Big Bear Lake between November 1 and April 30.
3. When the lake is between 6 and 7 feet below its maximum elevation, the District's board decides whether to release water from the lake.
4. If the lake is more than 7 feet below its maximum elevation, the District buys in-lieu water all year.

The District's policy regarding instream fishery releases is to allow only "leakage" from the dam and seepage. The District agreed in 1989, under a Stream Alteration Permit (Fish and Game Code section 1601) from the Department of Fish and Game for repairs to the dam, that instream flow will be maintained at no less than 0.106 cfs. The agreement has expired, but the District's policy is still to maintain this flow.

### 3.3 The Bear Creek Wild Trout Fishery

In 1988 the Department of Fish and Game (DFG) designated Bear Creek a wild trout stream because it has an excellent wild trout fishery resource and because its proximity to the urban areas of southern California provides exceptional value. This designation was made under Fish and Game Code section 1725 et seq. The designation was based on the fishery that exists downstream of



the confluence of West Cub Creek with Bear Creek, but the DFG designated the entire stream.

#### 3.4 Accessibility and Use of Bear Creek

Four trails provide access to Bear Creek. Figure 1 is a general location map showing Big Bear Lake, Bear Creek, the trails into Bear Creek, and the Santa Ana River. The access to Bear Creek via each of the trails is steep and difficult. Nevertheless, 700 visitor days, or two percent of the total hiking within the Forest Service district's boundaries, is associated with Bear Creek. Likewise, ten percent of the total fishing use within the Forest Service district is within the upper reaches of Bear Creek.

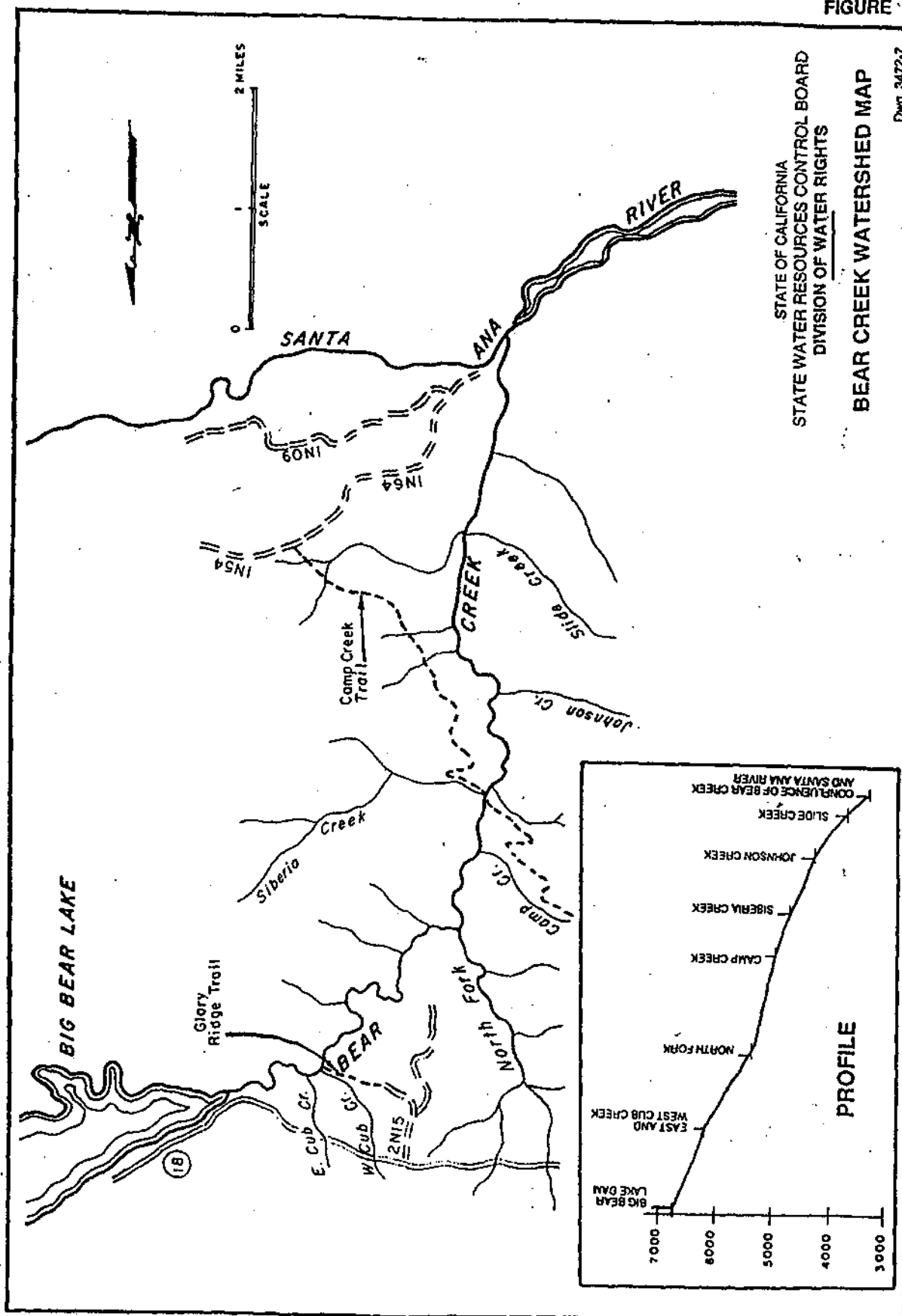
Bear Creek contains brown trout, rainbow trout, sculpin, and other fish life. It also provides habitat for three pairs of California spotted owls, the San Bernardino flying squirrel, the southern rubber boa, the two-striped garter snake, bats, and numerous other terrestrial wildlife species.

#### 3.5 Recreational and Fish and Wildlife Uses of Big Bear Lake

The four major categories of recreational use on Big Bear Lake are general boating, 48 percent; fishing, 37 percent; sailing, 9 percent; and water skiing, 6 percent. Shore uses include fishing, swimming, and sunbathing. The District operates a handicapped-access fishing pier on the north shore of Big Bear Lake. Two ski resorts occupy U.S. Forest Service land overlooking Big Bear Lake: Snow Summit and Bear Mountain. The ski resorts have contracts with the District to divert water from Big Bear Lake for snow making. The lake also provides visual benefits, and is aesthetically more attractive when it is full or nearly full of water.

Big Bear Lake also provides wildlife habitat. It is on the Pacific flyway and provides habitat for migrating waterfowl. Approximately 30 bald eagles inhabit Bear Valley during the

FIGURE 1



winter. The bald eagles are on the endangered lists under the state and federal<sup>2</sup> Endangered Species Acts. Also, up to 150 white pelicans live at the shallow east end of Big Bear Lake. The District and a private organization are working to develop 145 acres in the Stanfield Marsh at the shallow east end of Big Bear Lake into waterfowl habitat. Perches for the bald eagles have been provided in the vicinity of Stanfield Marsh. Finally, Big Bear Lake has a year-round stocked lake fishery.

Big Bear Lake and Bear Valley are heavily used for recreation, and attract numerous visitors to the area. During the summer recreational season of May through September, non-residents comprise 40 percent of all lake users on weekdays and 60 percent of all lake users on weekends. Boat use on Big Bear Lake and shoreline use including fishing ordinarily peak in July and August. Several physically handicapped individuals testified that the lake provided recreational opportunities for them while the creek was inaccessible to them. In 1992, there were 87,000 visitors, totalling over 123,000 visitor days, using the facilities operated by the Forest Service around Big Bear Lake. Over 917,000 visitors use the downhill ski resorts each winter.

### 3.6 Water Supply in Bear Valley

Most of the water used in Bear Valley for domestic or municipal uses is ground water. The City of Big Bear Lake and the Big Bear Community Services District operate a total of 77 ground water wells within Bear Valley. Twenty-one of the wells, accounting for 25 percent of the total annual pumpage, have been constructed since 1977.

Approximately 700 af of water is taken from Big Bear Lake each winter for snow making. Some of this water returns to the lake as runoff. Additionally, the City of Big Bear Lake has identified the lake as a potential source of water for future

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<sup>2</sup> The United States Fish and Wildlife Service has proposed to upgrade the bald eagle to threatened status.

municipal use, and also may in the future use 585 to 980 acre-feet per annum (afa) of lake water for ground water recharge.

The total combined average annual municipal and domestic water production from the wells is 4650.3 afa. The sustained yield of Bear Valley's ground water basin subareas is 3,050 afa.

(BBMWD/City Exhibit No. 5-10, p. 2-4.) Current water production exceeds the sustained yield, and by the year 2000 may exceed the sustained yield by up to 6,000 afa. A state of overdraft exists in the Division and Rathbone subareas, which are southeast of Big Bear Lake. Pumping levels are below the lake level at several wells in the Division and Grout Creek subareas. These wells, particularly in the Division subarea, appear to be less productive when the east end of Big Bear Lake, at Stanfield Marsh, dries up. Therefore, it appears that the lake and its tributary streams may contribute to the recharge of ground water.

Both the City of Big Bear Lake and the Big Bear Community Services District have water rationing programs which were in effect in 1993. However, they have not prepared and adopted a Water Shortage Contingency Plan, which is required under Water Code section 10620 et seq. for water suppliers who serve more than 3,000 customers or supply more than 3,000 afa. They also have not signed the Memorandum of Understanding regarding Urban Water Conservation in California, which the California Department of Water Resources completed June 11, 1991. The memorandum includes urban water conservation practices intended to reduce long-term urban water demands.

### 3.7 Waste Water Outfall

Treated waste water from Bear Valley is discharged to Lucerne Valley, outside the Bear Valley watershed. Currently about 2,273 afa is discharged to Lucerne Valley. This will increase to 3,397 afa at buildout. Under the 1977 judgment, the quantity of waste water discharged to Lucerne Valley is added to Mutual's lake storage account. If the water were treated to advanced levels (it currently receives secondary treatment), it could be reused

within Bear Valley for irrigation, dust control, and ground water recharge. Reclaiming the treated wastewater could benefit the District, since it would reduce the share of the lake water that is accounted to Mutual, and would lessen the overdraft of Bear Valley's ground water.

#### 4.0 PARTIES

On July 28, 1993, the SWRCB sent a Notice of Public Hearing and Notice of Pre-Hearing Field Orientation Tour to all parties who had indicated an interest in this matter. The SWRCB sent the following persons or entities notices by certified mail with a return receipt required: Bear Valley Mutual Water Company; Big Bear Watermaster; Mr. Jim Edmondson, Regional Manager of California Trout, Inc.; Mr. Steve Parmenter, Department of Fish and Game; Mr. Wayne Lemieux, Law Offices of Wayne Lemieux; Mr. Scott Smith, Best, Best & Krieger; Honorable Paul Woodruff, Member of the Assembly; California Trout, Inc.; Mr. Kevin O'Brien, Downey, Brand, Seymour & Rohwer, representing Big Bear Municipal Utility District; Ms. Rose Robinson, San Bernardino National Forest; Ms. Sheila Hamilton, General Manager, Big Bear Municipal Water District; Mr. Fred A. Worthley, Regional Manager, Region 5, Department of Fish and Game; Mr. Stuart L. Somach, DeCuir & Somach, representing City of Big Bear Lake; Mr. Stuart M. Richter, Katten, Muchin, Zavis & Weitzman, representing California Trout, Inc.; Honorable Bill Leonard, Member of the Senate; Mr. Steve L. Feldman, Attorney. The SWRCB sent notices by regular mail to six hundred and twenty-one others who indicated an interest in this proceeding.

The Notice of Public Hearing provided that any person who wanted to participate in the hearing must file with the SWRCB a Notice of Intent to Appear, which must be received by the SWRCB no later than August 16, 1993.

The following parties filed Notices of Intent to Appear: Papoose Bay Homeowners Association, California Trout, Inc., California Department of Fish and Game, U.S. Department of Agriculture

(Forest Service), Big Bear Municipal Water District and City of Big Bear Lake (joint filing), and the Santa Ana River-Mill Creek Cooperative Water Project.

Of these parties, the Papoose Bay Homeowners Association and the Santa Ana River-Mill Creek Cooperative Water Project did not file their pre-hearing submittals. The pre-hearing submittals required by September 27, 1993 were the written testimony of each witness, the proposed exhibits, the statements of witness qualifications for expert witnesses, and lists of the proposed exhibits.

Of the parties who filed their pre-hearing submittals, the positions of the parties can be divided into three groups. Cal-Trout and DFG recommended increased flow releases from Bear Valley Dam. The U.S. Forest Service provided extensive information regarding Bear Creek, Bear Valley, and Big Bear Lake, but did not make a recommendation. The District and the City of Big Bear Lake opposed increases in releases from the dam.

At the policy statement session of the hearing on September 29 and 30, 1993, Mr. George Grover, special counsel to San Bernardino Valley Municipal Water District appeared and advised the SWRCB that his client has water rights that are affected by releases from Big Bear Lake and is opposed to increasing releases from Bear Valley Dam for fishery protection. He said that Western Municipal Water District of Riverside County joined in his statement. In response to a question, Mr. Grover said that his client would not be presenting evidence in the evidentiary hearing.

The Notice of Intent to Appear filed by Santa Ana River-Mill Creek Cooperative Water Project's Management Committee stated that it is made up of the water right holders on the Santa Ana River. Mutual is a member of this Committee. John Shone, Managing Director of Mutual, was listed as a witness in the Notice of Intent to Appear. Based on the Notice of Intent to

Appear, it appeared that the Committee intended to represent Mutual's and others' water right interests in the hearing.

The Notice of Public Hearing listed nine key issues that the SWRCB would consider. Issue No. 7 asks in pertinent part:

"What are the water rights of the District and of Bear Valley Mutual Water Company? How would these water rights be affected if additional measures are necessary to protect fish and public trust resources in Bear Creek and Big Bear Lake?"

On October 7, 1993, having noted that the Santa Ana River-Mill Creek Cooperative Water Project's Management Committee had not filed its pre-hearing submittals, the SWRCB's staff contacted Mr. Shone by telephone and advised him that the SWRCB was considering joining Mutual as a party in the hearing and strongly urged that he or another representative of Mutual attend the hearing. The staff also advised Mr. Shone by letter dated October 7, 1993, that Mutual might be joined as a party.

On October 20, 1993, the SWRCB issued a Supplement to Notice of Public Hearing in which it gave notice that Mutual was a party and that as a result of this proceeding the SWRCB may modify Mutual's water rights.

Mutual admits to having received the July 28, 1993 Notice of Public Hearing, but nevertheless argues that it had not been properly notified that its water rights might be affected until it received the October 20, 1993 Supplement to Notice of Public Hearing. Mutual makes this argument even though the July 28, 1993 notice included Issue No. 7 addressing Mutual's water rights. Also, Mutual's interests apparently initially were going to be represented by the Santa Ana River-Mill Creek Cooperative Water Project's Management Committee. Consequently, Mutual was adequately notified of the potential effect of this proceeding on its water rights but elected not to appear until the SWRCB again explicitly and officially notified Mutual of the potential effect on its water rights in the October 20, 1993 notice. The

October 20, 1993 notice eliminated any argument that Mutual would not be affected by this proceeding.

Mutual now claims that on November 18 and 19, 1993 it had to respond to written testimony and exhibits that were all produced on that same day by the other parties. It is true that none of the parties had to submit their rebuttal evidence until November 18 and 19 when they testified, but the other parties were required by the October 20, 1993 notice to provide Mutual copies of all of their previously submitted exhibits, which include written testimony, by November 4, 1993, two weeks before the November 18-19 hearing. This is the same period of time that all the other parties were given to review exhibits in the others' cases in chief before the October 12 and 13 hearing dates. Absent evidence to the contrary, it can be assumed that the parties supplied their exhibits to Mutual on time. With respect to the rebuttal testimony, Mutual was treated exactly the same as all other parties, none of whom was entitled to see the others' rebuttal evidence before it was presented.

Although Mutual objected to its late joinder by the SWRCB in this proceeding, it had ample notice and opportunity to participate earlier. The SWRCB's hearings are open to entities that may have an interest. Any interested person may file a Notice of Intent to Appear and participate. For example, the City of Big Bear Lake participated as a full party, notwithstanding that it has no water rights or other property interests in Big Bear Lake and was not named in Cal-Trout's complaint. Mutual is one of the selected entities that received the hearing notice dated July 28, 1993 by certified mail. As noted above, the notice included Issue No. 7, which explicitly pointed to the potential effects on Mutual's water rights.

At the November 18 hearing, having appeared after having been notified of its joinder, Mutual asked for more time to cross-examine witnesses who had previously testified. In his opening statement, Mutual's attorney stated inter alia that



"we are objecting to the late joinder in the sense that it will deprive my client of various rights of due process unless the Board exercises its discretion to allow us to cross-examine witnesses at a later date that may have previously presented direct testimony." (Nov. 18, 1993, T,14:8-14:13.)

The SWRCB scheduled a further hearing date on December 13, 1993 to give Mutual a further opportunity to cross-examine any witnesses of the other parties and/or to present additional evidence. With the further hearing and because of the other factors discussed above, Mutual has had ample due process in this proceeding.

## 5.0 PUBLIC TRUST RESOURCES AND REASONABLE USE

### 5.1 SWRCB Authority

Cal-Trout filed its complaint with the SWRCB against the District under three theories: that the current flow release practices of the District violate the public trust doctrine, that these release practices constitute an unreasonable use of water, and that these release practices violate Fish and Game Code section 5937. Cal-Trout asked the SWRCB to require the District to release additional water from Bear Valley Dam for fishery protection.

Water is stored in Big Bear Lake under pre-1914 appropriative water rights held by the Bear Valley Mutual Water Company. The District retains the water Mutual appropriates from Bear Creek in Big Bear Lake, and in lieu of releasing water provides Mutual a substitute water supply.

Although the SWRCB does not issue a permit or license for a pre-1914 appropriation of water such as the Big Bear Lake appropriation, the SWRCB has authority to supervise the exercise of pre-1914 water rights under the public trust doctrine and under Water Code section 275, which implements California Constitution Article X, section 2. (See In re Water of Hallett Creek Stream System (1988) 44 Cal.3d 448, 243 Cal.Rptr. 887, 901, note 16, cert. den. 488 U.S. 824 and cases cited therein.) Based

on these authorities, the SWRCB has continuing authority under both the reasonableness doctrine and the public trust doctrine over all appropriations or other diversions of water for use. In applying these doctrines, the requirements of section 5937 should be taken into consideration.

Neither the February 1977 judgment<sup>3</sup> of the San Bernardino Superior Court in Big Bear Municipal Water District v. North Fork Water Company, et al., No. 165493, nor the decision in Big Bear Municipal Water District v. Bear Valley Mutual Water Company (1989) 207 Cal.App.3d 363, 254 Cal.Rptr. 757 deprives the SWRCB of jurisdiction in this matter. A judgment in private water right litigation does not bind claimants who were not parties to the litigation. (In re Waters of Long Valley Creek System (1979) 25 Cal.3d 339, 158 Cal.Rptr. 350, 354.) Therefore, neither case limits the authority of the SWRCB or a court to adjudicate the issues raised by Cal-Trout's complaint under the public trust doctrine<sup>4</sup>, and neither case conclusively determines the reasonableness of the diversion and uses reviewed in this Order. The previous litigation, and its effects on all water users, are considered in this Order.

This Order is an exercise of the SWRCB's continuing authority under the public trust doctrine and the reasonableness doctrine. Under the public trust doctrine the State retains supervisory control over navigable waters and the lands beneath those waters,

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<sup>3</sup> The judgment provides for a "physical solution" allowing the District to provide downstream water right holders who were parties to the litigation with a substitute water supply as an alternative to releasing water into Bear Creek from Big Bear Lake. Using a physical solution is intended to further the policy of Article X, section 2 of the California Constitution that waters be put to beneficial use to the fullest extent that they are capable. (City of Lodi v. East Bay Municipal Utility District (1963) 7 Cal.2d 316, 60 P.2d 439, 450.)

<sup>4</sup> The court in Big Bear Municipal Water District v. Bear Valley Mutual Water Co. did not hold it had no authority to modify the water rights under the public trust doctrine, but instead held that it had no obligation to reconsider the 1977 judgment under the circumstances of that case. The court noted that unlike the facts in National Audubon Society, there had been previous consideration of the public trust uses of Big Bear Lake in the 1977 judgment. See 254 Cal.Rptr. 757, at 767. The court did not decide whether the public trust doctrine applies to Big Bear Lake and Bear Creek.

as well as non-navigable waters that support a fishery. The purpose of the public trust is to protect navigation, fishing, recreation, fish and wildlife habitat and aesthetics. (National Audubon Society v. Superior Court (1983) 33 Cal.3d 419, 189 Cal.Rptr. 346, 357, cert. denied, 464 U.S. 977.)

No person can acquire a vested right to appropriate water in a manner harmful to interests protected by the public trust. But if the public interest in the diversion outweighs the harm to public trust values, water may be appropriated despite harm to public trust values. When it applies the public trust doctrine, the SWRCB has the power to reconsider past water allocations, and it has a duty of continuing supervision over the taking and use of appropriated water. (National Audubon Society, 189 Cal.Rptr. at 363-366.)

The SWRCB and the courts have concurrent jurisdiction to conduct proceedings applying the public trust doctrine. In recognizing the SWRCB's jurisdiction over diversion and use of all waters, the California Supreme Court in National Audubon Society emphasized the SWRCB's broad authority over allocation of water, including the power to adjudicate all competing claims, even riparian claims.

Measures required under the public trust doctrine must, in accordance with the decision in National Audubon Society at 189 Cal.Rptr. 362, meet the test of reasonableness under California Constitution Article X, section 2. Since this Order establishes requirements for protection of the public trust uses of Bear Creek, the SWRCB has applied the reasonableness doctrine to the flow requirements in this Order.

The reasonableness doctrine, which is set forth at California Constitution Article X, section 2, applies to the use of all waters of the state. It limits every water right. (Peabody v. Vallejo (1935) 2 Cal.2d 351, 40 P.2d 486.) The SWRCB and the courts have concurrent jurisdiction to conduct proceedings to

adjudicate issues under the reasonableness doctrine.

(Environmental Defense Fund, Inc. v. East Bay Municipal Utility District (1980) 26 Cal.3d 183, 605 P.2d 1, 161 Cal.Rptr. 466) The SWRCB has jurisdiction to conduct administrative proceedings applying the reasonableness doctrine to all water rights, including pre-1914 water rights that are not subject to the permit and license system administered by the SWRCB. (Imperial Irrigation District v. State Water Resources Control Board (1986) 186 Cal.App.3d 1160, 231 Cal.Rptr. 283.)

To determine what constitutes a reasonable use or diversion the SWRCB must consider the totality of the circumstances. The reasonableness of a use or diversion varies as conditions change, and is dependent on the facts of the case. (Environmental Defense Fund, Inc., supra.) To determine the reasonableness of a particular use, it is necessary to consider the effect of that use on other uses. (In re Waters of Long Valley Creek Stream System (1979) 25 Cal.3d 339, 599 P.2d 656, 158 Cal.Rptr. 350.) In this case, both the stream fishery uses and the numerous uses of the lake are beneficial uses.

#### 5.2 Applicability of Public Trust Doctrine to Bear Creek

The public trust doctrine applies to all tidal and navigable waters of the state, including waters that are navigable only to recreational craft. (People ex rel. Baker v. Mack (1971) 19 Cal.App.3d 1040, 97 Cal.Rptr. 448.) The public trust doctrine applies where diversions from non-navigable tributaries of navigable waters harm public trust uses of the navigable waters. (National Audubon Society, at 189 Cal.Rptr. 346, 357.) The public trust doctrine also applies to activities which harm the fishery in a non-navigable water. (People v. Truckee Lumber Co. (1897) 116 Cal. 397, 40 P. 374, 375; see California Trout, Inc. v. State Water Resources Control Board (1989) 207 Cal.App.3d 585, 255 Cal.Rptr. 184, 211-212.)

Some parties argued that Bear Creek is non-navigable, and therefore not protected by the public trust doctrine. It is not

necessary in this case to determine whether Bear Creek is navigable, because as noted above, the public trust doctrine protects fish in non-navigable waters.

5.3 Effect of Other Laws on the Establishment of Protections under the Public Trust Doctrine

5.3.1 Fish and Game Code Section 5937

Section 5937 of the Fish and Game Code is a legislative expression of the public trust doctrine. (See California Trout, Inc. v. State Water Resources Control Board (1989) 207 Cal.App.3d 585, 255 Cal.Rptr. 184, 209, 212.) Section 5937 is derived from an 1870 statute. The statute has been amended from time to time. It provides:

"The owner of any dam shall allow sufficient water at all times to pass through a fishway, or in the absence of a fishway, allow sufficient water to pass over, around, or through the dam, to keep in good condition any fish that may be planted or exist below the dam. During the minimum flow of water in any river or stream, permission may be granted by the department [DFG] to the owner of any dam to allow sufficient water to pass through a culvert, waste gate, or over or around the dam, to keep in good condition any fish that may be planted or exist below the dam, when, in the judgment of the department, it is impracticable or detrimental to the owner to pass the water through the fishway."

This section requires the owner of any dam upstream of waters that support fish to release enough water to keep the fish in good condition. Although this statute did not originally specify that water be released or bypassed for fish protection in the absence of a fishway, it does not exempt dam owners with dams that were constructed before this statute was amended. The rule requiring that fish be kept in good condition below the dam states the current obligation of the dam owner to bypass or release water from dams. (California Trout, Inc. v. State Water Resources Control Board (1989) 207 Cal.App.3d 585, 255 Cal.Rptr. 184, 195.) Even the original requirement for construction of a fishway was intended to be applied to dams built before the

requirement was first enacted. (See Stats. 1870, c. 457, section 3, pp. 663-664.)

It is the SWRCB's policy to enforce section 5937.<sup>5</sup> In Fish and Game District 4½ (Mono and Inyo Counties), Fish and Game Code Section 5946 requires the SWRCB to require compliance with Section 5937 whenever it issues either a permit or license. Bear Creek is not in District 4½.

Section 5946 and section 5937 of the Fish and Game Code have been construed together as a legislative determination of reasonableness which imposes mandatory enforcement obligations on the SWRCB. (California Trout, Inc. v. State Water Resources Control Board (1989) 207 Cal.App.3d 585, 255 Cal.Rptr. 184, 208.) No appellate law exists construing Section 5937 alone, but California Trout, Inc., can be read as indicating that section 5937 legislatively establishes that it is reasonable to release enough water below any dam to keep fish that exist below the dam in good condition. A release of water that is much in excess of the amount needed to keep the fish in good condition, however, could be unreasonable within the meaning of California Constitution Article X, section 2 if there would be adverse effects on other beneficial uses of the water.

#### 5.3.2 The Davis-Grunsky Contract

On August 29, 1988, the District and the Department of Water Resources executed a contract under the Davis-Grunsky Act. Under the contract, the Department of Water Resources agreed to grant to the District a maximum of \$4,583,206 for repairs to Bear Valley Dam. The contract is subject to various terms and conditions, including conditions requiring that the reservoir be operated for recreational purposes. The SWRCB construes the contract as an independent expression of public policy favoring the maintenance of recreational uses in Big Bear Lake.

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<sup>5</sup> Pursuant to its regulation at 23 CCR Section 782 the SWRCB includes in every new permit a provision requiring compliance with Section 5937.

#### 5.4 The Bear Creek Fishery

The fundamental issue in this proceeding is whether all of Bear Creek or only the reach downstream of West Cub Creek should be assured instream flows adequate to maintain a trout fishery in good condition. Above the confluences with the Cub creeks (upper Bear Creek), Bear Creek normally receives flow only from Bear Valley Dam and possibly from small streambed accretion flows. Approximately 0.6 miles below the dam is a ledge which apparently is a barrier to upstream migration of trout; this barrier is located in a narrow rocky gorge known as "Fish Canyon". No trout were observed upstream of the barrier in 1993, although sculpin and crayfish were observed in pools between the dam and Fish Canyon. Only a few adult trout were observed in 1993 in the reach of upper Bear Creek below Fish Canyon.

Although section 5937 requires that enough water be released to keep the fish in "good condition", this term is not defined. The trout fishery downstream of the Cub creeks usually is in good condition. During drought periods, however, tributary inflows and accretions to Bear Creek as far as the confluence with North Fork Bear Creek are too small to maintain the trout fishery in good condition. The critical period is summer, because both young of the year and adult fish are present, ambient temperatures are highest, and flows are lowest except shortly after thunderstorms. The current release is insufficient by itself to maintain trout populations and varied riparian habitat anywhere in Bear Creek, leaving the fishery dependent on inflows from tributaries to Bear Creek.

The DFG's fisheries biologist testified that he determines whether fish are in good condition by looking at the fish in their habitat. If the fish are abundant considering the stream size or its potential productivity, have enough food, have a low disease frequency, are in equilibrium with their environment, and have all life stages represented, he considers them to be in good condition. Based on these criteria, the DFG witness considered the trout fishery in Bear Creek to be in good condition below the

Cub creeks, but not in good condition above their confluence with Bear Creek. Additionally, the USFS hypothesized that the trout fishery above East Cub Creek could be self-sustaining if higher flows were maintained in that reach. No evidence exists, however, to confirm this hypothesis.

The District's biologist used measures of (1) standing crop; i.e., pounds of trout per acre or number per mile; (2) evidence of reproduction indicating a self-sustaining population; (3) growth rates of the fish; (4) health, or absence of disease; (5) angler catch rates; (6) number and diversity of aquatic invertebrates; (7) water quality; and (8) habitat quality to assess the condition of the fishery. Based on these measures and based on the Fish and Game Code definition of "fish"<sup>6</sup>, the District's biologist considered all of Bear Creek's fishery to be in good condition, even though the upper reach was not supporting a self-sustaining trout population. The District argued that the reach of Bear Creek upstream of the Cub creeks should not be managed for trout. The District argued that the fishery in this reach should be considered to be in good condition because it supports other "fish" in good condition, such as crayfish and prickly sculpin.

Below the Cub creeks, the majority of flows come from sources other than dam releases. The data suggest that in late summer of 1993, more than seventy percent of the flow in Bear Creek below the Cub creeks was from accretions and tributary inflows. During drought periods, flows from the dam become more important to the trout fishery below the Cub creeks as the tributary flows and accretions decrease.

While the upper 1.2 miles (upper reach) of Bear Creek above West Cub Creek adequately supports species requiring less flow than

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<sup>6</sup> "Fish" is defined at Fish and Game Code section 45 as meaning "wild fish, mollusks, crustaceans, invertebrates, or amphibians, including any part, spawn, or ova thereof."



trout need, it apparently does not currently support a self-sustaining trout fishery, and it is speculative whether the upper reach would be suitable for a trout fishery if more flow were provided in that reach. Although a few adult trout have been found in the lower part of the upper reach, between Fish Canyon and West Cub Creek, there is no evidence that trout reproduced in that reach during 1992 and 1993. Above Fish Canyon, planted trout have not survived. Additionally, several rock structures and boulder fields in the upper reach apparently act as barriers to upstream migration of trout.

The parties recommend several different instream flows to be maintained at the weir below Bear Valley Dam. Actual flows have varied. Between 1977 and 1986, the average flow varied from 1.21 cfs to 42.80 cfs. Between September 1986 and December 1988 the average flow was 0.088 cfs. In 1990, the average flow was 0.094 cfs, although the District intended to release 0.106 cfs. In 1989, DFG required a release of 0.106 cfs under a stream alteration agreement (Fish and Game Code section 1601) in connection with repairs to the dam, but that agreement has since expired. The District recommends maintaining 0.106 cfs, and argues that it is adequate.

Cal-Trout's final recommendation is to maintain 2 cfs on an interim basis until additional studies are done. According to Cal-Trout, the 2 cfs is ten percent of the long-term median inflow from the watershed above the dam. Cal-Trout said there could be a higher flow in wetter years and a lower flow in drier years. DFG recommends a minimum flow of 1.2 cfs, which is equal to the flow below West Cub Creek in 1991 and 1992. The fishery below West Cub Creek was in good condition in 1991 and 1992.

Cal-Trout requested that the SWRCB additionally require flushing flows during the spring. Flushing flows apparently are beneficial to habitat maintenance in Bear Creek because they can reduce the density of riparian vegetation and move fine sediments which could interfere with trout spawning and rearing habitat.

The amount, duration, and velocity of flows needed to produce these benefits is unclear. Since the District's operational policy will result in a fuller reservoir, there will be spills or high releases from time to time for flood control. These spills or high releases will produce the benefit of flushing flows. Therefore, no flushing flows are specified in this Order.

The SWRCB recommends, however, that the District consult with DFG and USFS whenever the District determines that a spill or a high volume release will occur, and cooperate to the maximum extent to manage the spill or high volume release to the greatest benefit for downstream habitat management and to minimize extreme, short duration changes in flow rates below Bear Valley Dam.

#### 5.5 Effects of Alternative Flow Releases

The SWRCB's staff analyzed three proposals for flow releases based on the parties' recommendations: (1) Cal-Trout's recommendation to release 2.0 cfs in all seasons of all years; (2) DFG's recommendation that the minimum release be 1.2 cfs; (3) The District's recommendation that the release be 0.1 cfs in all seasons of all years.

Additionally, SWRCB's staff analyzed a release rate requiring maintenance of 1.2 cfs in Bear Creek measured immediately downstream of the confluence with West Cub Creek in all years, with a minimum release of 0.3 cfs. The 0.3 cfs minimum release was the approximate flow at the weir downstream of Bear Valley Dam in the summer of 1993, when the sculpin and crayfish in the upper reach of Bear Creek were in good condition.

As explained above, the District's proposed release rate apparently does not maintain a trout fishery in the reach above the Cub creeks in good condition, and during dry years does not maintain the Bear Creek fishery above the confluence with North Fork Bear Creek in good condition. DFG's proposed release rate would supply the minimum flow recommended by DFG to all of Bear Creek. The staff-generated instream flow alternative would

supply the DFG recommended flow downstream of West Cub Creek. Cal-Trout's proposal would protect riparian habitat and fish populations better than DFG's proposal.

#### 5.5.1 *Method of Analysis of Effects on Lake Levels*

The District and the City produced the results of a computerized hydrological reservoir operation model in which it was assumed that the releases for instream flows would be (1) 6.0 cfs and 8.0 cfs plus flushing flows of 40 cfs (attributed to Cal-Trout proposal) or (2) 3.5 cfs plus flushing flows of 40 cfs (attributed to DFG proposal). Their results indicated that the assumed releases would require more water than historical inflow to the lake, substantially shrink the size of the lake, sometimes empty the lake, and release water under the rights of Mutual. The District and the City did not provide either their formulae or an electronic copy of the computer model; nor did they explain all of their assumptions in formulating and running the model. They declined to produce model results with releases for instream flows of 1.0 cfs and 2.0 cfs. In the absence of having the model in the record including its mathematical formulae, a full verification of its results, and an explanation of the assumptions used, the hydrological evidence produced by the District and the City are of little value in analyzing the lower releases considered in this Order.

Cal-Trout produced a model on rebuttal, and provided results with releases for instream flows of 1.0 cfs and 2.0 cfs, as requested by the SWRCB. According to Cal-Trout's model, the 1.0 and 2.0 cfs releases would never empty the lake; the average surface elevation would stay above 64.0 feet, and mean monthly drawdown would be 0.12 feet per month; there would be increased operational flexibility to minimize evaporation and spillage; and there would be no significant impact on recreational or fish and wildlife uses, water levels, or the economy.

Because the District produced neither the results of flow releases in the range the SWRCB was interested in analyzing nor

the documentation for its hydrological model, and because the Cal-Trout model needed verification, the SWRCB staff performed their own analysis to evaluate the effects of alternative releases.<sup>7</sup> The method of calculation is as follows:

- (1) The staff divided the 79-year historical precipitation record for the period October 1 to April 30<sup>8</sup> into three year types: wet (25 percent), normal (50 percent), and dry (25 percent). The staff reviewed both three year-type and five year-type hydrology classification systems and used the three year-type classification because this method requires fewer computations and produces results during the dry years which are very similar to the dry year results using five year types.<sup>9</sup>
- (2) The model calculates the end-of-month storage in Big Bear Lake using a hydrologic formula as follows:

Adjusted end-of-month storage = previous end-of-month storage + calculated unimpaired flow - instream flow release rate - District demands - releases to Mutual evaporation losses

The staff used the data produced by District's simulated model runs for calculated unimpaired flow, District demands, releases to Mutual, and calculated evaporation loss rates. (BBMWD/CITY 7-2, 7-3, 7-4, 7-5, 7-6, and 7-7) The staff used historical precipitation data and end of month storage data from the Big Bear Watermaster reports. Additionally, the staff used the following formulae:

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<sup>7</sup> The method used for these calculations, since the calculations were performed on a computer, is called a model, but it is essentially like a conventional, manual calculation method.

<sup>8</sup> Approximately 90 percent of the total annual precipitation at Big Bear Lake occurs during this period.

<sup>9</sup> If five water year types were used, they would be divided equally, with dry years occurring 20 percent of the time. A dry year using three year types averages 21.39 inches of precipitation while a dry year using five year types averages 20.55 inches of precipitation.

Estimated evaporation losses = evaporation loss rate x lake surface area;

Derived surface area =  $26.0139 \times \text{adjusted end-of-month storage}^{0.423}$ ;

Adjusted staff gage elevation =  $2.1702 \times \text{adjusted end-of-month storage}^{0.313}$ .

(3) The staff assumed:

- that the District's current operation policy would continue; i.e., no release of water for Mutual when the lake is at or below 4 feet below full (i.e., at staff gage elevation 68.33);
- for the staff-generated alternative that 1.2 cfs would be released during a dry year; 0.5 cfs would be released during a normal year; 0.3 cfs would be released during a wet year.<sup>10</sup>

Using this method, the SWRCB staff calculated the effects of each of the four alternative release rates on the water levels in Big Bear Lake. The following table summarizes the results.

#### SUMMARY OF MODEL RUN RESULTS

ALTERNATIVE RELEASE RATES	AVERAGE END-OF-MONTH STORAGE (acre-feet)	AVERAGE END-OF-MONTH SURFACE AREA (acres)	AVERAGE STAFF GAGE ELEVATION (feet)
Cal-Trout - (2.0 cfs)	52,386	2,548.1	64.41
DFG - (1.2 cfs)	54,326	2,595.9	65.34
District - (0.1 cfs)	56,930	2,656.0	66.48
Staff - (1.2 cfs below West Cub Creek)	55,470	2,623.2	65.85

When the lake is full, the staff gage elevation is 72.33 feet. This table shows that all four of the alternative release rates would keep the average level of Big Bear Lake above 62.33 feet on

<sup>10</sup> The staff-generated alternative was evaluated using information in the hearing record pertaining to flow readings below Bear Valley Dam. This information was used to estimate the releases needed to maintain 1.2 cfs below West Cub Creek. The assumed releases are the best estimate for maintaining 1.2 cfs.

the staff gage.<sup>11</sup> The Board's staff also calculated the number and frequency of months in the 624-month historical record during which the lake would have been below different staff gage elevations under each of the four alternative release rates. The following table shows the results of this calculation, expressed in percent of months below the specified lake level on the staff gage.

**SUMMARY OF FREQUENCY BELOW SELECTED LAKE LEVELS, IN PERCENTAGES OF MONTHS**

ALTERNATIVE RELEASE RATES	ELEVATION 72.33 FT. (FULL)	ELEVATION 67.33 FT. (-5')	ELEVATION 62.33 FT. (-10')	ELEVATION 57.33 FT. (-15')	ELEVATION 52.33 FT. (-20')
Cal-Trout - (2.0 cfs)	39.10%	29.65%	17.15%	7.37%	6.73%
DFG - (1.2 cfs)	40.71%	34.94%	14.10%	6.41%	3.85%
District - (0.1 cfs)	46.96%	34.62%	13.78%	4.65%	0.00%
Staff Alternative - (1.2 cfs below West Cub Creek)	41.67%	37.82%	12.34%	6.25%	1.92%

This table shows that, compared with the District's proposal, Cal-Trout's proposal would reduce the frequency of the lake being full to 5 feet below full by 7.86 percent, and 5 to 10 feet below full by 4.97 percent, with corresponding increases in frequency of lower lake levels. DFG's proposal would reduce the frequency of the lake being full to 5 feet below full by 6.25 percent, and would increase the frequencies of the lake being (1) 5 to 10 feet below full by 0.32 percent, (2) 10 to 15 feet below full by 0.32 percent, (3) 15 to 20 feet below full by 1.76 percent, and (4) more than 20 feet below full by 3.85 percent of the time. Stated another way, the lake level would be above 62.33 feet, or 10 feet below full, 68.75 percent of the time under Cal-Trout's proposal and 75.65 percent of the time under DFG's proposal.

<sup>11</sup> The critical level for maintaining recreational opportunities on the lake is approximately ten feet below full. The reservoir is ten feet below full when it is at 62.33 feet on the staff gage.

Under the District's proposal, the lake level would be above 62.33 feet 81.58 percent of the time. Under the staff-generated alternative, the lake level would be above 62.33 feet 79.5 percent of the time.

#### 5.5.2 *Effect of Alternatives on Lake Recreation*

The District provided an analysis of the economic effect of different lake levels. The analysis shows, with reference to pre-1977 operations, that the lake levels have affected the uses of the lake, and that in turn the available lake uses affect the local economy. In general, a high lake level in summer means that more tourists will spend money in the area, supporting the local economy. The area also attracts numerous visitors in the winter, for skiing in the ski areas adjacent to the lake. The population of Bear Valley in 1990 was 14,127, an increase of 28 percent since 1980. Almost all employed people in the local area are supported by tourism. The businesses include recreational businesses, lodging, and retail. Lodging includes 1,290 rooms with a 39 percent average occupancy rate. Annually, visitors spend approximately \$6.7 million in the area. According to Cal-Trout, approximately 94 percent of the spending is during the skiing season.

The lake level can affect recreation on the shoreline. There is a lack of usable beach and shoreline when the lake is full. Shoreline use increases as the lake level falls, until the lake is six feet below full. At six feet below full, the distance between access points and the lake shore increases, particularly on the shallower east end of the lake. The south shore marinas have to relocate when the lake level is more than five feet below full. When the lake level is more than ten feet below full, both the south and north shore marinas move their facilities to deeper water. Additionally, on the south shore some private docks are beached and some are moved to deeper water. Except on the east end of the lake, public boat ramps remain operable at 10 feet below full. At 20 feet below full, some north and south marinas are still able to move to deeper water, but 60 percent of

the private docks are out of operation and only the west boat ramps remain in operation.

In the winter, the ski areas obtain water from the lake to manufacture snow unless the lake level drops more than 18 feet below full. Under Cal-Trout's proposal, they could manufacture snow in approximately 93.27 percent of the years, and under DFG's proposal they could manufacture snow in approximately 96.15 percent of the years. Under the District's proposal, they can manufacture snow in approximately 100 percent of the years. Under the staff-generated alternative, they will be able to manufacture snow in approximately 98.08 percent of the years. During the winter, lake levels apparently do not affect recreation unless the ski resorts are unable to manufacture snow, since the lake is covered by snow and the recreational activities center around skiing.

The lake loses surface area as the lake level falls. This reduces boating space. At five feet below full, the lake surface is reduced by 240 acres (8 percent), and the surface area for higher speed boating is reduced by 300 acres (12 percent). At ten feet below full, the surface area is reduced by 520 acres (17 percent) and the area for higher speed boating is reduced by 670 acres (25 percent). Lower lake levels result in further acreage reductions.<sup>12</sup>

#### 5.5.3 *Effect of Alternatives on Fish and Wildlife Uses of the Lake*

The District and the City expressed concern that changes in lake level because of instream releases to Bear Creek could have adverse effects on bald eagles, which live in the Big Bear Lake area during the winter. The hearing record contains no evidence of any significant relationship between lake level and the number of bald eagles that overwinter in the area. Nor is there

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<sup>12</sup> On the other hand, evaporation losses from the lake are reduced at lower lake levels.



evidence that changes in the lake level will have significant effects on the lake's fish populations, which are a food source for the eagles. Over the eight years of available data, no obvious pattern of eagle use was apparent; the eight years included several years in which the lake was drawn down at least fourteen feet below full. The Forest Service witness testified that there is no correlation between lake level and eagle abundance or ability to feed. The eagle abundance depends on numerous factors that include lake levels, winter temperatures, number of sunny days, and winds. The Forest Service witness testified that while draining the lake for extended periods would have an adverse impact by removing waterfowl habitat, it was uncertain whether intermediate levels would have an adverse effect. Since bald eagles eat primarily fish, ducks, and other waterfowl, the Stanfield Marsh area is not critically important to eagle feeding. The waterfowl and the eagles move to adjacent shallow water of the lake when the marsh is dry or nearly dry.

The Stanfield Marsh is an area covering about 145 acres at the east end of Big Bear Lake. The marsh starts to dry when the lake is eight feet below full. The marsh is used by white pelicans and wintering eagles. A drop in lake level could subject the marsh to more frequent freezing, limiting the use by waterfowl. Further, lake fluctuations could expose species of special concern, such as the two-stripe garter snake, to predators for short periods.

Apparently fluctuations in the lake levels do not have substantial adverse effects on fish, waterfowl, and other wildlife. Therefore, the SWRCB finds that there will be no significant impact on these uses as a result of implementation of any of the analyzed alternatives.

#### *5.5.4 Considerations in Setting an Instream Flow*

The recommendation of the Department of Fish and Game was helpful in determining the needs of the Bear Creek fishery. The Department of Fish and Game is a trustee agency for fish and

wildlife, and has both the primary expertise of the State in dealing with fish and wildlife issues and the primary responsibility for interpreting the Fish and Game Code. The SWRCB is required to give great weight to Fish and Game's judgment with respect to fish and wildlife needs. (Bank of America v. State Water Resources Control Board (1974) 42 Cal.App.3d 198, 212, 116 Cal.Rptr. 770; see Water Code Sections 1243 and 1257.5.) This does not mean that the SWRCB must accept Fish and Game's judgment, but the weight of the evidence must overcome the weight of Fish and Game's evidence before the SWRCB will reject it.

The current releases are not adequate to maintain the trout in Bear Creek in good condition, particularly in drier years. In drier years, releases become important downstream of West Cub Creek. A higher rate of release than the current rate is necessary to maintain the existing fish in good condition. Maintaining the fish in good condition is critical to protecting the public trust uses downstream of the dam and it is a legal obligation of the District under Fish and Game Code section 5937.

Although the SWRCB is not obliged to strictly enforce section 5937 in this case, it is responsible to ensure reasonable protection for public trust uses. As discussed above, California Trout, Inc., 255 Cal.Rptr. 184, 208 suggests that maintaining fish in good condition as required by section 5937 is reasonable as a matter of law. A release that is too high, however, could be unreasonable because of adverse effects on other beneficial uses, including other recreational, environmental, or fish and wildlife uses.<sup>13</sup> Under extreme conditions, a too-high release could have adverse effects on the Bear Creek fishery by depleting the lake's supply of water to a level at which there was not

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<sup>13</sup> The SWRCB does not need to decide whether section 5937 is a legislative determination of reasonableness in this case; nor does the SWRCB need to decide whether the reasonableness doctrine would allow the SWRCB to authorize flows under the public trust doctrine that do not fully satisfy section 5937. The flows ordered in this case are reasonable and they also fully satisfy section 5937.

enough water to maintain the instream flow. The issue is what release rate will both achieve enough protection to maintain the fishery in Bear Creek and at the same time avoid impairing the beneficial uses of Big Bear Lake. There is a scarcity of data and studies to determine the benefits of different flow releases on the creek during different year types. The 2.0 cfs release Cal-Trout recommended likely would maintain the Bear Creek fishery. The DFG recommended that the absolute minimum release<sup>14</sup> should be 1.2 cfs.

While more flow might produce more stream fishery benefits, it is uncertain how much benefit will occur; further studies and actual experience with this flow level are needed before the relative fishery benefits can be determined more accurately.

The recreational benefits of the lake are highly important to the local economy and reductions in recreational lake use should be minimized. Nevertheless, the lake can be drawn down some distance before summer recreation is significantly impacted. Further, more than 90 percent of recreational dollars are spent in the winter, when lake levels are less important. Snow-making can continue so long as the lake stays above 18 feet below full.

As proposed by the staff generated alternative, this Order requires releases from Bear Valley Dam adequate to maintain an instream flow in Bear Creek below West Cub Creek of 1.2 cfs all year, with a minimum instream flow of 0.3 cfs measured at the weir below Bear Valley Dam. This is the minimum flow which the evidence indicates is likely to maintain the fish in Bear Creek below West Cub Creek in good condition. The 0.3 cfs minimum flow required just below Bear Valley Dam should be sufficient in many months, when combined with accretion and tributary flows from the

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<sup>14</sup> The SWRCB interprets DFG's reference to "release" as meaning the instream flow.

Cub creeks, to meet the 1.2 cfs requirement at a measuring point in Bear Creek immediately below West Cub Creek.

The 0.3 cfs minimum flow also should provide more stabilized conditions for the fish living in Bear Creek above the Cub creeks. The SWRCB finds that this Order will provide enough flow in upper Bear Creek to keep in good condition the fish that are present there, such as sculpin and crayfish. The flows required by this Order are not intended to support trout above Fish Canyon, because trout apparently (1) are absent from this area and (2) cannot migrate past a barrier at Fish Canyon.

The reach between Fish Canyon and the Cub creeks contains a few adult trout which will be supported by the required flows. The flows occurring in this reach will be substantially increased, especially during summer months in drier years, compared with current conditions. This area, however, may not be appropriate for all life stages of trout. The habitat is limited, with narrow, rocky terrain. Further, the evidence in the hearing record is extremely limited with respect to the trout populations and available habitat in this reach, and substantial evidence does not support the establishment of flow requirements that might or might not support trout reproduction in this reach.

Based on the evidence and the above analyses of the effects of meeting these instream flows on Big Bear Lake and on the recreational uses in Bear Valley, these instream flows will provide both reasonable protection for the public trust uses in Bear Creek and reasonable protection of the recreational, environmental and fish and wildlife uses and other uses of Big Bear Lake and Bear Valley, within the meaning of California Constitution, Article X, section 2. These flows also are low enough so that they will not interfere with Mutual's ability to divert this water downstream for its consumptive uses.

To determine whether these instream flows are adequate and effective, this Order requires that the District conduct a study

in consultation with the DFG and the Forest Service to determine the effect of the required releases and the effects of higher and lower releases. The monitoring required in this Order is the minimum necessary, and may be supplemented. The results of the study shall be reported to the SWRCB.

The SWRCB will retain continuing authority over the instream flow requirements, and any party may in the future petition the SWRCB for a temporary or permanent change in the streamflow required by this Order. The SWRCB will have discretion whether to accept or reject any petition after reviewing its contents. The instream flow requirements in this Order will remain in effect unless evidence received in a future proceeding establishes that a different streamflow is necessary either to protect public trust uses or to ensure that water is diverted and used in accordance with California Constitution, Article X, section 2.

#### 5.5.5 *Potential Effects of Unrelated Actions on Lake Level*

As noted in Sections 3.6 and 3.7, above, ground water wells are used to supply domestic water in Bear Valley. These wells are extracting water in excess of the sustained yield of the ground water basin subareas. After it is used, the water obtained from ground water is treated and discharged to Lucerne Valley, outside the Bear Valley watershed.

The ground water extractions have the potential to reduce the level of water in Big Bear Lake. The streams tributary to Big Bear Lake and the lake itself may contribute to recharge of the ground water. If recharge occurs from either the tributaries or the lake itself, water either will not reach the lake or will be extracted from the lake to the ground water basin subareas. This could reduce the lake level significantly if the communities in Bear Valley do not minimize losses because of consumptive uses. The loss of water to consumptive uses could affect lake levels substantially more than this Order. The Bear Valley communities may in the future have to implement measures to minimize water

losses; the available measures could include conservation and treating and reusing the wastewater within Bear Valley.

## 6.0 ENVIRONMENTAL CONSIDERATIONS

### 6.1 Categorical Exemption from California Environmental Quality Act

This Order is adopted for the purpose of enforcing public trust protections of the fishery in Bear Creek. Under Fish and Game Code section 5937 and the public trust doctrine, the District and Mutual already are obligated to release enough water to maintain the fishery in good condition. Thus, the function of this Order is to define the amount of water that is necessary for this purpose. The above discussion explains how the SWRCB arrived at the instream flow releases required by this Order. Determination of the required releases was tempered by the reasonableness doctrine in California Constitution, Article X, Section 2 and was balanced against protection of other recreational environmental, and fish and wildlife uses which exist in Bear Valley and Big Bear Lake.

Where a regulatory agency such as the SWRCB takes an action to enforce a law, general rule, standard, or objective, that action is categorically exempt under Title 14, California Code of Regulations, Section 15321(a)<sup>15</sup> from the requirement for preparation of environmental documents unless the action falls within an exception. The exceptions are listed in section 15300.2. The only exception which could apply in a case such as this is the one in subdivision (c). It provides:

"A categorical exemption shall not be used for an activity where there is a reasonable possibility that the activity will have a significant effect on the environment due to unusual circumstances."

It is unclear what constitutes a "reasonable possibility" that compliance with this Order will have a significant adverse effect

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<sup>15</sup> This action also qualifies for an exemption under sections 15307 (protection of natural resources) and 15308 (protection of the environment).

on the environment. Public Resources Code section 21082.2 requires preparation of an EIR if there is substantial evidence, in light of the whole record before the agency, that a project may have a significant adverse effect on the environment. The existence of public controversy in itself does not require the preparation of an EIR. Substantial evidence "shall include facts, reasonable assumptions predicated upon facts, and expert opinion supported by facts." (Pub. Res. Code § 21082.2 subd. (c).) Substantial evidence, according to this subdivision, does not include argument, speculation, unsubstantiated opinion or narrative, evidence which is clearly inaccurate or erroneous, or evidence of social or economic impacts which do not contribute to, or are not caused by, physical impacts on the environment.<sup>16</sup>

The record does not contain substantial evidence that the releases required by this Order will have a significant adverse effect on the environment. As explained in more detail in Section 5 of this Order, the District and the City provided evidence regarding the effects of higher release rates and argued against any change in release rates, but did not supply requested analysis regarding the release rates considered in this Order. During the hearing, the hearing officer made all parties aware of the SWRCB's interest in reviewing the effects of 1.0 cfs and 2.0 cfs release rates, and requested model runs analyzing these release rates. No substantial evidence was provided showing that the 1.0 cfs or 2.0 cfs release rates would have a significant adverse effect. Cal-Trout provided evidence which upon analysis shows that there will not be a significant adverse effect.

The evidence shows that the changes in lake elevation because of this Order will not be significantly greater than the changes in

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<sup>16</sup> It should be noted that the "fair argument" test using the substantial evidence standard in section 21082.2 has been applied only in deciding whether to prepare an EIR or a negative declaration. (Laurel Heights Imp. Assn. v. Regents, 94 Daily Journal D.A.R. 70, 76 (1994) (Laurel Heights II).) Where an exemption is involved, a less stringent test may be appropriate; the "reasonable possibility" language implies that an agency should weigh the evidence to decide whether an EIR must be prepared instead of relying on the exemption.

lake elevation under the current regime during the three year types. In turn, the effects on both the local economy and the recreational, environmental, and fish and wildlife uses of Big Bear Lake and Bear Valley will be insignificant. Additionally, the great weight of the evidence favors using the exemption. Therefore, there is no reasonable possibility that this Order will have a significant adverse effect on the environment.

#### 6.2 Endangered Species Act Considerations

The District argued that a reduction in the surface area or volume of Big Bear Lake could have possible adverse effects on bald eagles. A number of bald eagles overwinter at Big Bear Lake. Their principal food sources are fish that they can obtain from the lake and migratory waterfowl. The bald eagle is listed as endangered under both the California Endangered Species Act (Fish and Game Code §§ 2050 to 2098) and the federal Endangered Species Act (16 USCA §§ 1531 to 1544).

Under Fish and Game Code section 2090, each state lead agency shall consult with the DFG to ensure that any action by the state lead agency is not likely to jeopardize the continued existence of any endangered or threatened species. A "state lead agency" is defined as the state agency, board, or commission which is a lead agency under CEQA. Because this Order is categorically exempt from compliance with CEQA, the SWRCB is not a state lead agency, and is not required to consult with the DFG under section 2090. With respect to the federal Endangered Species Act, no consultation is required because no federal action is necessary in this case. The federal act only requires consultation where a federal agency is taking an action. (See 16 USCA § 1536.)

Further, as discussed above, implementation of this Order is very unlikely to have any adverse effect on the bald eagles, and certainly would not have a discernible effect. The evidence shows that the experts cannot correlate bald eagle populations with lake levels. A combination of factors apparently determines whether the eagles will spend the winter at Big Bear Lake. While



this Order will cause minor changes in lake level, it will not cause the lake to go dry. At the more likely intermediate lake levels, there is no indication that the eagles would avoid Big Bear Lake or be adversely impacted. Consequently, this Order will not have adverse effects on bald eagles. Since there will be no adverse effects on the bald eagles, this Order does not involve a taking of the eagles, and does not require additional measures to obtain authorization from either DFG or the United States Fish and Wildlife Service.

#### 7.0 CONCLUSIONS

Based on the foregoing, the SWRCB concludes that:

1. Both the District and Mutual are properly respondents in this proceeding, and this Order may properly modify the water rights of either or both of these parties.
2. This Order places a joint obligation on both the District, as the owner of Bear Valley Dam and as a holder of an interest in the water rights in Big Bear Lake, and on Mutual, as the water right holder. The SWRCB expects that releases of water for the fishery will be accounted first to water in the District's lake account and then to Mutual, in accordance with the 1977 stipulated judgment.
3. In most years the fishery is in good condition downstream of West Cub Creek, but could benefit from additional flows, particularly in dry years.
4. The appropriate minimum instream flow to provide reasonable protection for the trout fishery in Bear Creek below West Cub Creek is 1.2 cfs.
5. This Order does not have an expiration date, but this Order retains continuing authority to review the instream flow requirements. The District shall consult with the DFG and the Forest Service to develop a workplan and conduct studies

to determine whether the required flows will keep the trout fishery in good condition. The District shall report to the SWRCB regarding its studies.

ORDER

IT IS HEREBY ORDERED that:

1. a. The Big Bear Municipal Water District and the Bear Valley Mutual Water Company shall jointly or severally release enough water from Bear Valley Dam and Big Bear Lake to maintain a minimum flow of 1.2 cubic feet per second as measured at a measuring device to be located in Bear Creek no more than 500 feet downstream of the confluence with West Cub Creek. The flow rate shall be calculated as a seven-day running average; however, the Big Bear Municipal Water District shall ensure that flow shall not be less than 1.0 cubic feet per second, calculated on a daily (24-hour) average.
- b. The release from Bear Valley Dam and Big Bear Lake shall not be less than 0.3 cubic feet per second as measured by a measuring device located approximately 300 feet downstream of the toe of Bear Valley Dam.
- c. Reductions in releases, as measured 300 feet downstream of the toe of Bear Valley Dam, for fishery protections that are required by this Order shall be made gradually, at no more than 0.2 cubic feet per second per day, to minimize stranding of fish.
2. Pursuant to California Water Code sections 100 and 275 and the common law public trust doctrine, the State Water Resources Control Board retains continuing authority over the rights to water impounded by Bear Valley Dam in Big Bear Lake to modify the instream flow requirements in Paragraph 1 of this Order. No action will be taken pursuant to this paragraph unless the State Water Resources Control Board

determines, after notice to affected parties and opportunity for hearing, that such action is consistent with California Constitution Article X, section 2; is consistent with the public interest; is consistent with the public trust doctrine.

3. a. Within six months of the adoption of this Order, the Big Bear Municipal Water District shall submit for approval of the Chief of the Division of Water Rights a plan showing the types, locations and construction schedule for installation of gages which are capable of continuously measuring flows required by this Order. The Big Bear Municipal Water District shall obtain all necessary authorizations for installation and operation of the gages. The Big Bear Municipal Water District shall monitor instream flows at (1) a measuring device located approximately 300 feet below the Bear Valley Dam and (2) a measuring device in Bear Creek to be installed within 500 feet downstream of the confluence with West Cub Creek. Said measuring devices shall be properly maintained.
- b. The Big Bear Municipal Water District shall maintain a continuous record of the required flows sufficient to document compliance with the terms of this Order and shall make such record available to the State Water Resources Control Board and to other interested parties upon request of the State Water Resources Control Board.
- c. The Big Bear Municipal Water District shall submit a report by December 31 of each year that verifies compliance with the terms of this Order for the previous water year ending September 30. Documentation for the report shall be submitted to the Division of Water Rights on personal computer disc format. The computer system compatibility shall be designated by the Chief of the Division of Water Rights.

- d. The Big Bear Municipal Water District shall conduct studies to determine whether the measures required by this Order maintain the trout fishery in Bear Creek in good condition. The Big Bear Municipal Water District shall, before commencing studies, consult with the Department of Fish and Game and the U.S. Forest Service, and prepare a workplan that defines the scope, responsible parties, and time schedule for the studies. The workplan shall be submitted to the Chief of the Division of Water Rights for approval no later than six months after the effective date of this Order.
4. The Chief, Division of Water Rights, is delegated authority to authorize variances in the instream flows for the purpose of either (1) conducting studies to determine whether the minimum instream flows or some other instream flows will provide reasonable protection for the trout fishery in Bear Creek or (2) to avoid unreasonable impacts to the lake level or instream flows. The Big Bear Municipal Water District or the Bear Valley Mutual Water Company may request a variance by filing a written request and sending copies of the request to the Department of Fish and Game, the United States Forest Service, and California Trout, Inc. Any variance may be subjected to terms and conditions, and shall remain in effect for a period not to exceed one year. A variance may be authorized only if it will have no unreasonable effect on the environment. If environmental documentation is necessary, the party requesting the variance shall prepare such documentation.
5. The Big Bear Municipal Water District shall consult with the Department of Fish and Game and the U.S. Forest Service whenever the Big Bear Municipal Water District determines that a spill or a high-volume release will occur. Consistent with time and operational constraints, the district shall manage the spill or high volume release to the greatest benefit for downstream habitat management and to minimize

extreme, short duration changes in flow rates below Bear Valley Dam.

**CERTIFICATION**

The undersigned, Administrative Assistant to the Board, does hereby certify that the foregoing is a full and correct copy of an order duly and regularly adopted at a meeting of the State Water Resources Control Board held on February 16, 1995.

AYE:        John P. Caffrey  
             James M. Stubchaer  
             Marc Del Piero  
             Mary Jane Forster  
             John W. Brown

NO:         None

ABSENT:    None

ABSTAIN:   None

  
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Maureen Marché  
Administrative Assistant to the Board